

# Engineering

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- V031 Subsurface Utility Engineering**  
This video covers planning for locating underground utilities.
- V042 Setting Speed Limits**  
Describes background and misconceptions of speed zones and the procedures for determining speed limits on highways and local roads. Components and considerations of a traffic engineering survey are discussed. The adoption of a resolution and the erection of signs for enforcement are also discussed.
- V055 Roadway Design: Balancing Safety, Environment, and Cost**  
This video focuses on the importance of considering these three factors when constructing or reconstructing a roadway. The objective is to help educate citizens and public officials on issues affecting roadway design, and to demonstrate engineering practices that are useful in achieving this balance.
- V058 Pedestrian Safety: What you Can Do**  
Discusses designing safer pedestrian walkways and the Walk Alert Program.
- V062 Stressing Our Future**  
This is a good video showing the stresses put on rural roads by agricultural vehicles.
- V063 Protecting Our Pavements: Preventative Maintenance**  
This video discusses preventive pavement maintenance, specifically techniques and training, improved planning methods, and dedicated funding.
- V071 Highway Safety Improvement Program - Traffic Safety**  
This videotape contains information on identifying highway safety problems and solutions, evaluating and selecting the best safety alternatives, and evaluating safety program results.
- V072 Highway Safety Improvement - Equipment Management Systems Series**  
This video provides an introduction to EMS and discusses keeping a record of equipment inventory, equipment maintenance, parts and supplies management, financial management, equipment management information sub-systems and EMS implementation.
- V090 A Gift of Value - Value Engineering**  
Presents the six steps of Value Engineering.
- V094 Pedestrian Safety: What you Can Do**  
Discusses designing safer pedestrian walkways and the Walk Alert Program.
- V099 Walk**  
This video explains the importance of and shows how to plan for pedestrian traffic and safety.
- V108 Air Quality Conformity in Transportation**  
Describes types of air pollution in general and specifically transportation related air pollutants. Emphasizes compliance with the State Air Pollution Control Plan and how under compliance can impact federal funding for transportation related projects. Good video for urban transportation planners in major metropolitan areas.
- V153 Field Testing Concrete**  
Organized in three parts: preparation, sampling, and testing; slump test and casting cylinders; air content.
- V160 Alkali-Silica Testing**  
Discusses Alkali-Silica reactivity (ASR) as a major cause of cracking in concrete. The tape contains the conventional and new methods of determination, prevention and testing of ASR.
- V166 Quality Control of Concrete on Site**  
4 Part Video. This video deals with Quality Control at the construction site.  
Part 1 tests include sampling, temperature, and slump.  
Part 2 tests include air content, unit weight, cylinders and beams for subsequent tests.  
Parts 3 and 4 show new quality control tests for two categories: "as delivered concrete" (water content, thermal effects, evaluation) and "as placed concrete" (maturity monitoring, temperature-matched curing, pulse velocity testing, nuclear density testing).
- V168 Freeze-Thaw Testing**  
Discusses causes and prevention of freezing the concrete pavement in addition to conventional and new testing